UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10
1200 Sixth Avenue, Suite 900
Seattle, Washington 98101-3140

JUL 25 2014

OFFICE OF
COMPLIANCE AND ENFORCEMENT

Reply to: OCE-084

Carl Bach
EH&S Remediation Project Manager
The Boeing Company
P. O. Box 3707, M/C 1W-12
Seattle Washington 98124-2207

Re: Risk-based Disposal Approval for the Soil Excavation and Stormwater Filtration Swale, Boeing Military Flight Center, Tukwila, Washington

Dear Mr. Bach:

This letter constitutes approval under the authority of 40 Code of Federal Regulations (C.F.R.) § 761.61(c) for the cleanup, associated verification sampling and analysis, storage and disposal of certain polychlorinated biphenyl (PCB) remediation waste at The Boeing Company (Boeing) Military Flight Center facility in Tukwila, Washington. More specifically, this approval authorizes Boeing, subject to the requirements for cleanup and disposal of PCB remediation waste imposed by this approval pursuant to 40 C.F.R. § 761.61(c), to clean up certain PCB contamination off-site of the Boeing Military Flight Center and to install a stormwater filtration swale to help reduce the quantity and concentration of PCBs which may migrate off-site through surface and stormwater. This approval is in response to Boeing's request for a risk-based disposal approval dated June 9, 2014 (Reference 1) based on the referenced work plan (Reference 2).

A number of sources of PCBs have been identified at the Boeing Military Flight Center (MFC). In 2005 and 2006, Boeing conducted removal of concrete joint material containing PCBs in the tarmac area of the MFC (References 3 and 4). Subsequent to this removal, stormwater inspections conducted by the Washington State Department of Ecology (Reference 5) and follow-up sampling detected the presence of PCBs. Analytical results for samples collected during Department of Ecology (Ecology) managed source trace sampling on March 27, 2012 and September 19, 2012 showed PCBs in storm drain solids ranging from 13 to 100 ppm, well above acceptable levels. Ecology has requested that Boeing develop a source tracing plan for flight line PCB source identification and, if needed, control and remediation. Portions of this work were conducted as part of a self-implementing cleanup (References 6 and 7, and subsequent addenda, References 8 and 9) that outlined additional source characterization work. Results of these source characterization activities and initial cleanup are documented in Reference 10 and Reference 11.

To address off-site PCB contamination documented in the References identified above, and to provide for additional control of PCBs which may enter surface water flowing off-site of the MFC, Boeing prepared an application and is seeking a risk-based disposal approval from EPA. In transmitting its request for approval Boeing identified additional sources of PCBs that remain at the MFC including paint and caulk in the 13-01 building and additional concrete joint material not previously removed from the MFC tarmac area. Accordingly, the risk-based disposal approval provided by this letter authorizes

the specific work described in Boeing's application, subject to the conditions set forth herein, is not a final or complete cleanup of PCBs at the MFC. EPA understands that Boeing is currently developing plans to address the remaining PCBs at the MFC, and will be conducting this work in 2015.

This written decision for a risk-based method for cleanup, storage, and disposal of PCB remediation waste is based on Boeing's application for a risk-based disposal approval (RBDA) consisting of the documentation identified in Enclosure 1. All sections of the RBDA application, including those referenced in this approval, are incorporated by reference. In granting this approval, EPA finds that the proposed cleanup and verification of PCB remediation waste, subject to the conditions below, will not pose an unreasonable risk of injury to health or the environment. Boeing shall ensure that activities conducted pursuant to this approval are in full compliance with conditions of the approval. The terms and conditions of this approval are established pursuant to 40 C.F.R. § 761.61(c) and enforceable under the Toxic Substances Control Act (TSCA). Any actions which deviate from the terms and conditions of this approval may result in administrative, civil, or criminal enforcement in accordance with Sections 16 and 17 of TSCA, 15 U.S.C. §§ 2615 and 2616.

Conditions

1. Boeing is authorized to perform cleanup of PCB remediation waste, associated verification sampling, and construction and operation of a storm water filtration swale as documented in Reference 2.

2. Boeing must complete installation of the stormwater filtration swale and complete cleanup of PCB remediation waste on King County Airport property within six (6) months of the effective date of this approval, including submission of the draft cleanup report to EPA as documented in Section 7 of Reference 2. This approval will remain in effect indefinitely with respect to the operation, maintenance and monitoring of the stormwater filtration swale as approved pursuant to Condition 5. Boeing may provide a written request to EPA pursuant to Condition 10 to modify or terminate this approval following the completion of PCB bulk product waste removal and cleanup of any remaining PCB remediation waste at the MFC as necessary to comply with the requirements of 40 C.F.R. Part 761 and to demonstrate that PCBs on-site or that may migrate off-site no longer pose an unreasonable risk of injury to health or the environment.

3. Boeing is authorized to dispose of PCB remediation waste generated pursuant to cleanup and decontamination activities subject to this approval as documented in Sections 3.1-3.3 of Reference 2.

4. All equipment that have been in contact with PCB remediation waste subject to this approval must be disposed of or decontaminated following completion of work under this approval. All disposable equipment or materials must be disposed of in a facility permitted, licensed or registered by a State to manage municipal solid waste subject to 40 C.F.R. Part 258, or municipal non-hazardous waste subject to 40 C.F.R. §§ 257.5 through 257.30, as applicable. Non-disposable equipment and structures must be decontaminated using mechanical means or pressure washing to achieve a "clean debris surface" as defined in 40 C.F.R. § 268.45, Table 1, footnote 3. Water generated from decontamination activities must be managed in accordance with the applicable provisions of 40 C.F.R. § 761.79(b)(1).

Boeing will ensure that any decontamination conducted pursuant to this approval will be conducted in compliance with the requirements of 40 C.F.R. 761.79(e)-(g).

5. Within 60 days of completion of construction of the stormwater filtration swale, Boeing will provide EPA with a draft updated facility Storm Water Pollution Prevention Plan (SWPPP), which will include a performance monitoring sampling and analysis plan for characterizing the effectiveness of the stormwater swale, and to the extent practicable based on whole water influent and effluent stormwater sampling, evaluation of the accumulation of PCBs within the stormwater swale filtration media. This plan will include requirements for obtaining representative samples, and applicable quality assurance/quality control requirements that will ensure data are of sufficient quantity and quality for the evaluation purposes noted below. Upon review and approval by EPA, this performance monitoring plan will be considered incorporated by reference into this approval. Monitoring may be conducted for a period of up to one year following approval to ensure an entire season of precipitation and stormwater flow events is reflected in the sampling results. EPA will use the results of this performance monitoring plan, in consultation with Ecology, to determine those additional source control or stormwater treatment requirements which may be necessary to ensure PCBs which may migrate off-site of the MFC through the stormwater filtration swale do not pose an unreasonable risk of injury to health or the environment, and to ensure compliance with stormwater quality standards which may be established by Ecology under the authority of 40 C.F.R. § 761.79(b)(1)(ii). EPA will use whole water influent and effluent stormwater sampling results for PCBs to determine when maintenance or replacement of filtration swale media may be necessary, and Boeing will collect solids concentration data from the spent filtration media to determine the appropriate disposal method for the media. Notice of changes to the SWPPP related to requirements of this Condition following initial approval by EPA must be provided to Ecology, and to EPA as a request for a modification pursuant to Condition 10.

6. Boeing will ensure that a copy of this approval is provided to contractor(s) responsible for conducting work subject to requirements of the approval. Boeing will ensure that any contracts it issues and any associated contract directions are consistent with the requirements of this approval. Boeing is responsible for ensuring compliance with this TSCA Risk Based Disposal Approval.

7. Nothing in this approval relieves Boeing of any obligation to comply with any EPA or Ecology administrative action, or any statutory requirements, or rules or regulations applicable to the activities subject to this approval.

8. Within seven (7) days following the effective date of this approval, Boeing will provide EPA with written or e-mail notice of its project manager responsible for overall implementation of work subject to this approval. The initial EPA TSCA project manager is identified in Condition 11. The respective project managers will be responsible for timely and routine communication regarding implementation of this approval, including reporting pursuant to Condition 9.

9. If at any time before, during, or after conduct of activities subject to this approval, Boeing possesses or is otherwise made aware of any data or information (including but not limited to site conditions that differ from those presented in the application) that activities approved herein may pose an unreasonable risk of injury to health or the environment, Boeing must report such data or information via facsimile or e-mail to EPA within five working days at the project manager level, and in writing to the Regional Administrator within 30 calendar days of first possessing or becoming

aware of such data or information. At his or her sole discretion, the EPA project manager may waive the written reporting requirement for those issues that are determined to be minor, or can be timely resolved without modification of this Approval. Boeing shall also report in the same manner, new or different information related to a condition or any element of the approved activities if the information is relevant to this approval. EPA may direct Boeing to take such actions it finds necessary to ensure the approved activities do not pose an unreasonable risk of injury to health or the environment. Boeing shall follow such direction until written approval is obtained from the EPA that finds the condition(s) requiring such direction no longer poses an unreasonable risk of injury to health or the environment.

10. EPA reserves the right to modify or revoke this approval based on information provided pursuant to Condition 9, or any other information available to EPA that provides a basis to conclude that activities covered by this approval pose an unreasonable risk of injury to health or the environment. Boeing may request modification of this approval by providing a written request to EPA. If the EPA agrees with a request for modification, the EPA will provide written approval to Boeing. Prior to obtaining written approval of a modification request, Boeing shall comply with the existing approval conditions.

11. Submissions required by this approval shall be provided to EPA as follows:

EPA: Edward J. Kowalski, Director
Office of Compliance and Enforcement
EPA Region 10
1200 6th Avenue Suite 900, MS OCE-184
Seattle, Washington 98101
E-mail: Kowalski.edward@epa.gov
Facsimile: 206-553-4743

With copies to the EPA Project Manager:

Dave Bartus
Office of Air, Waste and Toxics
EPA Region 10
1200 6th Avenue, Suite 900, MS AWT-122
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Should you have any questions or comments, please contact Dave Bartus at (206) 553-2804, or Bartus.dave@epa.gov.

Sincerely,

Edward J. Kowalski
Director

Enclosures

1. References
2. Statement of Basis

cc: Robert Wright
Ecology Northwest Regional Office

Peter Dumaliang
King County Industrial Waste Program

Enclosure 1

References

1) Letter, "Notification of PCB Cleanup under 40 CFR 761.61(c), Boeing Military Flight Center, Tukwila WA," Carl Bach, EHS Remediation Project Manager, The Boeing Company, to Dennis J. McLerran, Regional Administrator, EPA Region 10, dated June 9, 2014.

2) Work Plan, "Work Plan, Soil Excavation and Stormwater Filtration Swale, Military Flight Center, Tukwila, Washington" Landau Associates, dated May 15 2014.

3) Letter and Report, "Report of 2005 Removal of Concrete Joint Material at Boeing Military Flight Center," Stephen D. Ryan, The Boeing Company, to Dan Duncan, EPA Region 10, dated February 7, 2006.

4) Letter and Report, "2006 Removal of Concrete Joint Material Report," Stephen D. Ryan, The Boeing Company, to Dan Duncan, EPA Region 10, dated March 26, 2007.

5) Inspection Report, "Stormwater Compliance Inspection Report for Boeing Military Flight Center," Washington State Department of Ecology, dated February 12, 2013.

6) Letter, "Notification of Self-Implementing PCB Cleanup Plan, Boeing Military Flight Center, Tukwila, Washington," Steven Tochko, EHS Remediation Manager, The Boeing Company to Dennis McLerran, Regional Administrator, EPA Region 10, dated June 6, 2013.

7) Work Plan, "Evaluation of Potential Polychlorinated Biphenyls Sources, Military Flight Center, Tukwila, Washington," Landau Associates, dated May 6, 2013.

8) Work Plan, "Addendum, Evaluation of Potential Polychlorinated Biphenyls Sources, Military Flight Center, Tukwila, Washington," Landau Associates, dated July 18, 2013.

9) Work Plan, "Addendum No. 2, Evaluation of Potential Polychlorinated Biphenyls Sources, Military Flight Center, Tukwila, Washington," Landau Associates, dated August 27, 2013.

10) Report, "PCB Source Evaluation, Military Flight Center, Tukwila, Washington," Landau Associated, dated December 10, 2013.

Enclosure 2

Statement of Basis

Introduction

The Boeing Military Flight Center is located east of East Marginal Way South, adjacent to the south end of King County International Airport (KCIA). The MFC is an industrial facility with approximately 24 acres of impervious surface. Three office/support buildings and other smaller structures (crew shelters and sheds) are located at the facility. The flightline is parallel to the KCIA and can park and service up to 10 aircraft. Facilities at the site support the flightline and consist of aircraft storage, flight preparation, general servicing, maintenance, and repair. The MFC facility also has an aircraft wash pad with drainage that is directed to the sanitary sewer system during airplane washing operations.

Background

A number of sources of PCBs have been identified at the Boeing Military Flight Center (MFC). In 2005 and 2006, Boeing conducted removal of concrete joint material containing PCBs in the tarmac area of the MFC (References 3 and 4). Subsequent to this removal, stormwater inspections conducted by the Washington State Department of Ecology (Reference 5) and follow-up sampling detected the presence of PCBs. Analytical results for samples collected during Department of Ecology (Ecology) managed source trace sampling on March 27, 2012 and September 19, 2012 showed PCBs in storm drain solids ranging from 13 to 100 ppm, well above acceptable levels. Ecology has requested that Boeing develop a source tracing plan for flight line PCB source identification and, if needed, control and remediation. Portions of this work were conducted as part of a self-implementing cleanup (References 6 and 7, and subsequent addenda, References 8 and 9) that outlined additional source characterization work. Results of these source characterization activities and initial cleanup are documented in Reference 10 and Reference 11.

To address off-site PCB contamination documented in the References identified above, and to provide for additional control of PCBs which may enter surface water flowing off-site of the MFC, Boeing prepared an application and is seeking a risk-based disposal approval from EPA. In transmitting its request for approval Boeing identified additional sources of PCBs that remain at the MFC including paint and caulk in the 13-01 building and additional concrete joint material not previously removed from the MFC tarmac area. Accordingly, the risk-based disposal approval provided by this letter authorizes the specific work described in Boeing's application, subject to the conditions set forth herein, is not a final or complete cleanup of PCBs at the MFC. EPA understands that Boeing is currently developing plans to address the remaining PCBs at the MFC, and will be conducting this work in 2015.

EPA's Evaluation of Boeings Risk-Based Disposal Approval Application

In evaluating Boeing's request for a risk-based disposal approval, EPA has considered the following issues:

- The history of investigation and cleanup at the facility
- The proposed cleanup of contaminated soils on KCIA property
- The proposed stormwater swale design and operation
- The relationship of the proposed work to the facility as a whole and future work

The history of investigation and cleanup at the facility

As noted in the Background section above, a number of sources of PCBs at the MFC have been identified. Some, but not all, of these sources of PCBs have been cleaned up or removed from service (e.g., concrete joint material or CJM). Historically, and likely on an on-going basis, these PCBs have migrated off of the MFC property through storm drains, and via surface sheet flow, principally to the east onto grassy areas and an asphalt-lined stormwater conveyance located on King County International Airport (KCIA) property. Off-site stormwater flow is of particular interest to EPA and to Ecology as the receiving water body for MFC stormwater flow is ultimately the Lower Duwamish Waterway, listed on the National Priorities List principally based on PCB contamination in sediments. Therefore, both EPA and Ecology place particular emphasis on both source reduction and control or treatment of stormwater to minimize or eliminate further discharge of PCBs to the Lower Duwamish Waterway.

Cleanup work to date has resulted in a considerable reduction in the total quantity of PCBs at the MFC facility, although additional PCBs need to be removed from service or cleaned up. Specific details of cleanup work completed in the recent past is documented in Section 1.0 of Reference 2. The work proposed under this approval is intended to focus on additional cleanup of PCBs, specifically those that have migrated off-site onto soils on KCIA property, and to construct a stormwater filtration swale that will assist in reducing or eliminating those PCBs which may continue to migrate off-site from the MFC facility through the surface water pathway.

The proposed cleanup of contaminated soils on KCIA property

The objectives of the activities subject to this approval are to remove accessible soil that contains PCBs in locations identified during summer and fall 2013 field soil sampling events (See Reference 11) and to install a stormwater filtration swale during the site restoration activities. The work described in this work plan is intended to be a complete cleanup to address all PCBs detected in soil east of and adjacent to the MFC blast fence. EPA notes that while the approved work is expected to be complete within the stated scope, it is not a complete cleanup of PCBs at the MFC facility. Rather, the work subject to this approval addresses only PCBs on off-site property that, until cleaned up, pose an unreasonable risk of injury to health and the environment. Accordingly, EPA's determination that the activities authorized under this approval pose no unreasonable risk of injury to health and the environment is limited to the off-site area subject to the approval.

After reviewing Boeing's application, EPA has determined that, the approved cleanup, verification sampling, and disposal of PCB remediation waste will not pose an unreasonable risk of injury to health and the environment pursuant to 40 C.F.R. § 761.61(c).

The proposed stormwater swale design and operation

Existing site characterization data support a conceptual site model whereby surface water runoff from the MFC tarmac area has led to PCBs entering the stormwater drainage system east of the MFC on KCIA property. While on-site source control work has reduced the quantity of PCBs which may contribute to stormwater contamination, some sources of PCBs remain. Thus, there is a potential that stormwater migrating off-site of the MFC may continue to contain PCBs at levels that pose an unreasonable risk to health or the environment. Boeing's proposed installation of a stormwater filtration swale is a necessary and appropriate measure intended to effectively remove any remaining PCBs that may be present in stormwater impacted by the MFC.

The design basis for the filtration swale, as documented in Reference 2, is to remove PCBs associated with particulates (as opposed to PCBs dissolved in storm water). Based on experience gained treating water containing soils or sediments contaminated with PCBs, such as at the Boeing Plant 2 site, EPA agrees that this is an appropriate approach. EPA agrees that the proposed design basis and the engineering design itself is appropriate for the stormwater filtration swale. Further, EPA has determined that construction and operation of the stormwater filtration swale will provide substantially improved removal of PCBs in stormwater over current baseline conditions, and that unreasonably withholding approval of the stormwater filtration swale will delay work intended to reduce the potential for PCBs to migrate in stormwater off-site of the MFC. The construction of the filtration swale is expected to occur during the summer dry season.

Boeing's proposal does not, however, include any performance monitoring of the filtration swale to provide objective documentation that it performs as expected and, most importantly, sufficiently reduces the quantity and concentration of PCBs in storm water discharges to meet the decontamination standard of 40 C.F.R. 761.79(1)(b)(ii). Therefore, EPA is including as a condition of this approval a requirement and schedule for Boeing to develop a performance monitoring plan to address these questions. The requirements for this performance monitoring program are established on a performance basis, which means that work under the monitoring plan yield data that can be used to evaluate whether PCBs which may migrate off-site of the MFC through the stormwater filtration swale pose an unreasonable risk of injury to health or the environment, and to evaluate compliance with stormwater quality standards which are or may be established by Ecology, under the authority of 40 C.F.R. § 761.79(b)(1)(ii). Based on the results of this performance monitoring study, EPA may require Boeing to take such additional steps as necessary to meet these two performance standards. EPA notes that while requirements under this approval will be established pursuant to TSCA authority, EPA intends to coordinate with Ecology to ensure TSCA and state water quality requirements are harmonized.

The relationship of the proposed work to the facility as a whole and future work

As noted elsewhere in this approval, both the cleanup and stormwater filtration swale construction address specific and discrete aspects of PCB contamination and off-site migration at the MFC. Boeing's application for this approval (Reference 1) documents that Boeing is currently developing plans to address remaining contamination associated with CJM in the MFC tarmac area, as well as paint and caulk on the 13-01 Building. Work on these remaining documented sources of PCBs is expected to take place in 2015. After completion of this work, EPA expects to work closely with Boeing to conduct an overall evaluation of the entire MFC to ensure that all PCBs are removed from the facility or are cleaned up to ensure that the standard of no unreasonable risk of injury is met for the facility as a whole,

specifically considering off-site and stormwater discharges. As part of this overall evaluation of the entire MFC, EPA may require additional monitoring above and beyond what will be required under the performance monitoring plan discussed in Condition 5 as necessary to make a decision whether or not any remaining PCBs at the MFC pose an unreasonable risk of injury to health or the environment.

Discussion of Conditions

1. Boeing is authorized to perform cleanup of PCB remediation waste, associated verification sampling, and construction and operation of a storm water filtration swale as documented in Reference 2.

This condition provides overall authorization under TSCA for the work documented in Reference 2. EPA notes that in addition to the specific requirements for soil cleanup and storm water filtration swale cleanup, Reference 2 also includes a Health and Safety plan, including training and emergency response requirements, applicable to work under this approval (Appendix C of Reference 2).

2. Boeing must complete installation of the stormwater filtration swale and complete cleanup of PCB remediation waste on King County Airport property within six (6) months of the effective date of this approval, including submission of the draft cleanup report to EPA as documented in Section 7 of Reference 2. This approval will remain in effect indefinitely with respect to the operation, maintenance and monitoring of the stormwater filtration swale as approved pursuant to Condition 5. Boeing may provide a written request to EPA pursuant to Condition 10 to modify or terminate this approval following the completion of PCB bulk product waste removal and cleanup of any remaining PCB remediation waste at the MFC as necessary to comply with the requirements of 40 C.F.R. Part 761 and to demonstrate that PCBs on-site or that may migrate off-site no longer pose an unreasonable risk of injury to health or the environment.

This condition establishes the overall schedule for work to be conducted under this approval, and how the various requirements of the approval will remain in effect. Boeing has indicated, and EPA agrees, that construction work under this approval will occur during the summer dry months, which will minimize or eliminate generation of liquids (stormwater and groundwater) and the attendant management requirements for contaminated water. Therefore, EPA expects that construction work will be completed well within the allotted six month period.

3. Boeing is authorized to dispose of PCB remediation waste generated pursuant to cleanup and decontamination activities subject to this approval as documented in Sections 3.1-3.3 of Reference 2.

This condition provides authority to dispose of the contaminated media and other materials that are expected to be generated pursuant to activities under this approval. The disposal requirements in Sections 3.1-3.3 are consistent with those applicable to self-implementing cleanups under 40 C.F.R § 761.61(a) and established agency policy for disposal requirements applicable to bulk PCB remediation waste.

4. All equipment that have been in contact with PCB remediation waste subject to this approval must be disposed of or decontaminated following completion of work under this approval. All disposable equipment or materials must be disposed of in a facility permitted, licensed or registered by a State to manage municipal solid waste subject to 40 C.F.R. Part 258, or municipal non-hazardous waste

subject to 40 C.F.R. §§ 257.5 through 257.30, as applicable. Non-disposable equipment and structures must be decontaminated using mechanical means or pressure washing to achieve a "clean debris surface" as defined in 40 C.F.R. § 268.45, Table 1, footnote 3. Water generated from decontamination activities must be managed in accordance with the applicable provisions of 40 C.F.R. § 761.79(b)(1).

Boeing will ensure that any decontamination conducted pursuant to this approval will be conducted in compliance with the requirements of 40 C.F.R. 761.79(e)-(g).

This condition compliments Condition 3, but is specific to equipment, such as construction equipment and sampling equipment associated with the project. EPA notes that this condition is consistent with requirements applicable to self-implementing cleanups under 40 CFR 761.61(a) and established agency policy for disposal requirements applicable to bulk PCB remediation waste.

5. Within 60 days of completion of construction of the stormwater filtration swale, Boeing will provide EPA with a draft updated facility Storm Water Pollution Prevention Plan (SWPPP), which will include a performance monitoring sampling and analysis plan for characterizing the effectiveness of the stormwater swale, and to the extent practicable based on whole water influent and effluent stormwater sampling, evaluation of the accumulation of PCBs within the stormwater swale filtration media. This plan will include requirements for obtaining representative samples, and applicable quality assurance/quality control requirements that will ensure data are of sufficient quantity and quality for the evaluation purposes noted below. Upon review and approval by EPA, this performance monitoring plan will be considered incorporated by reference into this approval. Monitoring may be conducted for a period of up to one year following approval to ensure an entire season of precipitation and stormwater flow events is reflected in the sampling results. EPA will use the results of this performance monitoring plan, in consultation with Ecology, to determine those additional source control or stormwater treatment requirements which may be necessary to ensure PCBs which may migrate off-site of the MFC through the stormwater filtration swale do not pose an unreasonable risk of injury to health or the environment, and to ensure compliance with stormwater quality standards which may be established by Ecology under the authority of 40 C.F.R. § 761.79(b)(1)(ii). EPA will use whole water influent and effluent stormwater sampling results for PCBs to determine when maintenance or replacement of filtration swale media may be necessary, and Boeing will collect solids concentration data from the spent filtration media to determine the appropriate disposal method for the media. Notice of changes to the SWPPP related to requirements of this Condition following initial approval by EPA must be provided to Ecology, and to EPA as a request for a modification pursuant to Condition 10.

This condition establishes the schedule and performance requirements for development of a performance monitoring sampling and analysis plan. The basis and rational for this condition is documented in the section "The proposed stormwater swale design and operation" above. As discussed in the section "The relationship of the proposed work to the facility as a whole and future work," EPA may require additional monitoring above and beyond what will be required under this performance monitoring plan as necessary to make a decision whether or not any remaining PCBs at the MFC pose an unreasonable risk of injury to health or the environment.

EPA expects that data from the performance monitoring plan represent an entire year of precipitation events. As a practical matter, depending on the date of the performance monitoring plan approval, it

may be that representative data may obtained in less than a full year given reasonably expected precipitation patterns at the MFC. EPA's review of the performance monitoring plan itself and the data generated by it will ensure that the data are in fact representative for their intended use.

EPA is interested in evaluating the accumulation of PCBs in the filter media over time to evaluate the accumulation of PCBs within the filter media, for purposes of evaluating whether any maintenance or replacement of the filtration system may be necessary should significant quantities of PCBs accumulate. Due to the design and construction of the filtration system, including the geotextile material separating the various media layers, direct sampling of the filtration media would likely adversely affect the integrity and performance of the filtration system. Therefore, EPA believes that comparison of influent and effluent sampling data is the most viable approach to obtaining data for determining if and when maintenance or replacement of the filtration system may be necessary.

6. Boeing will ensure that a copy of this approval is provided to contractor(s) responsible for conducting work subject to requirements of the approval. Boeing will ensure that any contracts it issues and any associated contract directions are consistent with the requirements of this approval. Boeing is responsible for ensuring compliance with this TSCA Risk Based Disposal Approval.

This condition emphasizes Boeing's responsibility for acts or omissions of its contractors, and helps ensure that work is conducted according to requirements of this approval.

7. Nothing in this approval relieves Boeing of any obligation to comply with any statutory requirements, or rules and regulations applicable to the activities subject to this approval, including any Ecology administrative action.

This condition establishes that this approval under TSCA does not relieve Boeing of any other obligation that it may have with respect to the approved activities.

8. Within seven (7) days following the effective date of this approval, Boeing will provide EPA with written or e-mail notice of its project manager responsible for overall implementation of work subject to this approval. The initial EPA TSCA project manager is identified in Condition 10. The respective project managers will be responsible for timely and routine communication regarding implementation of this approval, including reporting pursuant to Condition 9.

Based on experience with previous cleanup projects with Boeing, EPA and Boeing recognized the need for enhanced communication with respect to this approval based on a project management approach. EPA is establishing this condition, as well as related condition language in Condition 9 below, to reflect this objective.

9. If at any time before, during, or after conduct of activities subject to this approval, Boeing possesses or is otherwise made aware of any data or information (including but not limited to site conditions that differ from those presented in the application) that activities approved herein may pose an unreasonable risk of injury to health or the environment, Boeing must report such data or information via facsimile or e-mail to EPA within five working days at the project manager level, and in writing to the Regional Administrator within 30 calendar days of first possessing or becoming aware of such data or information. At his or her sole discretion, the EPA project manager may waive the written reporting requirement for those issues that are determined to be minor, or can be

timely resolved without modification of this Approval. Boeing shall also report in the same manner, new or different information related to a condition or any element of the approved activities if the information is relevant to this approval. EPA may direct Boeing to take such actions it finds necessary to ensure the approved activities do not pose an unreasonable risk of injury to health or the environment. Boeing shall follow such direction until written approval is obtained from the EPA that finds the condition(s) requiring such direction no longer poses an unreasonable risk of injury to health or the environment.

This condition ensures that if any information not available to EPA at the time this approval is issued becomes known, and it will be made available to the EPA for purposes of ensuring that activities subject to this approval continue to pose no unreasonable risk of injury to health or the environment. This condition also ensures EPA's ability to make changes to the storage activities, including withdrawing approval for storage, as necessary to ensure no unreasonable risk of injury to health or the environment.

10. EPA reserves the right to modify or revoke this approval based on information provided pursuant to Condition 9, or any other information available to EPA that provides a basis to conclude that activities covered by this approval pose an unreasonable risk of injury to health or the environment. Boeing may request modification of this approval by providing a written request to EPA. If the EPA agrees with a request for modification, the EPA will provide written approval to Boeing. Prior to obtaining written approval of a modification request, Boeing shall comply with the existing approval conditions.

This condition establishes a mechanism whereby this approval may be modified by EPA, either independently or upon request to EPA.

11. Not restated here as it is self-explanatory.